

Claims

1. Method for the analysis of the degradation resistance of native starch, wherein a pre-determined amount of native starch is suspended in a buffer, a starch degrading substance added, a reagent added, said reagent forming a coloured complex in the presence of reducing sugars, the components forming a test solution, **characterized** in that the test solution is incubated at a temperature below the gelatinisation temperature of the starch, and the colour change evaluated, without preceding heat-treatment or chemical treatment of the starch.

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2. Method according to claim 1, **characterized** in that

10 - the buffer used has about neutral pH and contains about 0.01 M chloride ions,

- α -amylase is added to the starch suspension,

- the test solution is incubated at a temperature in the interval of about 35°C - about 70°C,

- a sample is taken from the test solution and filtered before mixing with the reagent, and -

the colour change of the test solution is determined as a function of time.

15 3. Method according to claim 2, **characterized** in that

- the buffer used has a pH of about pH 6.6,

- the test solution is incubated at a temperature in the interval of about 37 °C - about 42°C, and

- the absorbency is measured by scanning the wavelength interval of 450 to 500 nm and the absorbency determined at the maximum value occurring within this interval.

20 4. Method according to claim 1, **characterized** in that the reagent is 3,5 dinitro salicylate.

5. Method according to claim 2, **characterized** in that the reagent is 3,5 dinitro salicylate.

6. Method according to claim 3, **characterized** in that the reagent is 3,5 dinitro salicylate.

7. Method according to claim 4, **characterized** in that the reagent solution is filtered before use.

8. Method according to claim 1, **characterized** in that the enzymatic degradation properties of untreated granules of a known fraction are used for comparative purposes.

25 9. Method according to claim 1, **characterized** in that different fractions of starch are compared with respect to their ability to resist enzymatic degradation.

10. Method according to claim 1, **characterized** in that different starch formulations are compared with respect to their ability to resist enzymatic degradation.
11. Method according to claim 8, **characterized** in that the values obtained are used to predict the enzymatic degradation behavior of starch *in vivo*.
12. Method according to claim 9, **characterized** in that different fractions of starch are compared with respect to their ability to resist enzymatic degradation.
13. Method according to claim 10, **characterized** in that different fractions of starch are compared with respect to their ability to resist enzymatic degradation.
14. Method according to claim 8, **characterized** in that the values obtained are used to predict the enzymatic degradation profile of starch *in vivo*.
15. Method according to claim 9, **characterized** in that the values obtained are used to predict the enzymatic degradation profile of starch *in vivo*.
16. Method according to claim 10, **characterized** in that the values obtained are used to predict the enzymatic degradation profile of starch *in vivo*.

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